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UNION OF TEACHERS OF THE DEAF ON THE PURE ORAL SYSTEM.

President ... LIONEL VAN OVEN, ESQ.
Vice-President: B. ST. JOHN ACKERS, ESQ.

Transactions of the Society.

ON THE

TREATMENT OF CHILDREN MENTALLY DEFICIENT.

AN ADDRESS

BY

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December 12th, 1895.

No. II.

Offices—
11 FITZROY SQUARE, LONDON, W.

PRICE TO NON-MEMBERS OF THE UNION 1/6.

UNION OF TEACHERS OF THE DEAF ON THE PURE ORAL SYSTEM.

No. 2. *TRANSACTIONS OF THE SOCIETY.* Dec., 1895

LECTURE

DELIVERED AT

The Second General Meeting of the Union,

BY

G. E. SHUTTLEWORTH, B.A., M.D.,

&c.

The Rev. Dr. W. STAINER, in the Chair,

On Thursday, December 12th, 1895.

THE TREATMENT OF CHILDREN MENTALLY DEFICIENT.

IN an unwary moment I consented to the suggestion, flatteringly made to me, to deliver to the "Union of Teachers of the Deaf on the Pure Oral System" an address on "The Treatment of Children Mentally Deficient." I fear that in the hastily-prepared remarks which I now have the honour to submit to you there will be but little worthy of your attention; but as your Honorary Secretary urged, with kind persistence, that my special experience in a line of work analogous to, though different from, your own, might be of some interest, I venture to fulfil my pledge to the best of my ability.

Casting backwards a glance on the early history of efforts to improve the imbecile, we find that those who had been connected with institutions for the Deaf and Dumb took a prominent part in the preliminary stages of that work. The story of the "Sauvage de l'Aveyron" is a case in point, and as this case is often referred to as having led to the investigation of the needs of the mentally deficient class, I shall quote from Séguin (himself the pioneer in the training of idiots) a few picturesque sentences. "In 1801" (says he) "the citizen, M. Bonaterre, discovered in the forest of Aveyron, France, a wild boy. This naked boy was marked with numerous scars: nimble as a deer, he subsisted on roots and nuts, which he cracked like a monkey, laughing at the falling snow, and rolling

himself with delight in this white blanket. He seemed to be about 17 years of age. Bonaterre permitted this wild boy to escape, but afterwards re-took him and sent him at his own expense to the Abbé Sicard, Director of the Asylum for the Deaf and Dumb at Paris. Sicard had just succeeded the illustrious Abbé De l'Epée, and Bonaterre thought him to be the most suitable man to perform the miracle of which he dreamed—the education of this creature, the most inferior he had ever seen under the form of humanity." Sicard, however, seems soon to have tired of this unaccustomed task, and after some months, during which he had been exhibited as a sort of aboriginal specimen of the Genus *Homo*, the wild boy passed into the care of M. Itard, aurist to the Institution, and an aural physiologist and surgeon of considerable note. Itard took him into his own house and provided a governess for him, who for five years endeavoured to cultivate his faculties, with however but little result. In the end he was remitted to the Hospital for Incurables, and although the result was unsatisfactory, Itard's observations of the mental and sensory deficiencies of the case, made on scientific lines, and subsequent reflections as to the indications for treatment, bore fruit when his pupil Séguin undertook at his instance (in 1837) the training of a young idiot in the Children's Hospital of Paris. Itard's conclusions were that to succeed in ameliorating the mental condition of the wild boy (Victor) the objects to be aimed at were:—

1st. To develop the senses.
2nd. To develop the intellectual faculties.
3rd. To develop the affective functions.

This is in fact the basis upon which all successful training of the feeble-minded is conducted.

At a later period (1842) we find Saegert, Director of the Deaf and Dumb Institution at Berlin, making a study of imbecile children admitted amongst his other pupils, and ultimately organising a separate department of the Institution for the training of idiots.

In America, also, efforts were early made in connection with Deaf and Dumb Schools to improve the condition of feeble-

minded children ; and it is recorded that one was subjected to training in the Hartford Institution as early as 1818.

While, however, there are some analogies in the two classes of infirmity, there are distinct differences ; and the system appropriate to the one requires to be modified for the other. Deaf mutes and children mentally deficient are both abnormal in their relations with the world around them ; but, whereas with the former it is a case of "knowledge at *one* entrance quite (or partially) shut out," with the latter there is an incapacity for mental action due to imperfection—or, at any rate, imperfect action—of the nervous centres, sometimes, indeed, of the whole nervous system.

When a mentally feeble child is "dumb" it may be from one of several causes. It may, of course, be from defective hearing, and then we have the difficult case to deal with—(of which more anon)—of the "deaf idiot" or the "idiotic deaf mute." But more frequently the defective child lacks language, because he lacks ideas ; sometimes, indeed, there is a want of power to co-ordinate the complex muscular movements necessary for speech ; at others there is mal-development of the parts essential for speech production. Dr. Langdon-Down has remarked that of 276 children at one time under his care, as many as *118* were "dumb from the absence of mental power to co-ordinate the vital mechanism of speech into an aptitude for articulate sounds." We meet also with cases of inability to speak (aphasia) from disease or imperfect development of the third left frontal (Broca's) convolution (situated above the left ear), and this is often associated with evidence of want of power of other portions of the brain, and with paralysis of some of the muscles. Classifications of mentally-deficient children have been made upon the basis of powers of speech ; but, though speech is an important factor, it is not the sole standard of discrimination between varying degrees of intelligence, and in practice we find we have at the two extremes two very different classes of children to deal with—the dull, apathetic child, who does not speak because he has not the energy to do so, and the restless, excitable child, deficient in self-control, but not necessarily deficient in speech.

The physical characteristics of different types, and especially the form and size of the skull, will often aid us in gauging the capacities for improvement of defective children. A brief reference to these may not be out of place, especially as you may glean some hints serviceable in the identification of mental feebleness resulting therefrom amongst deaf children. An abnormally small skull denotes, as a rule, defect of brain development; and at the school age a head measuring in its greatest circumference less than 18 inches goes with mental deficiency, while I have had under my care patients with heads measuring no more than 14 and 15 inches. I show you a cast of the brain of one (of 29) with such a head: it weighed but $12\frac{1}{2}$ ounces, just one-fourth of what would be normal! Then by way of contrast to the last (called *microcephalus*), we have the over-large head with spreading globular outline, the result of inflammation of its contents in early life leading to what in popular parlance is called "water on the brain," or *hydrocephalus*. A circumference of 23 inches is not an uncommon measurement for such—it may run on to 28 or even 30—and if the contents were good brain matter we should expect gigantic genius; but, unfortunately, there is but little brain matter, the head being filled up with inflammatory products, not necessarily fluid, but at any rate a lowly organized form of tissue. As old Fuller quaintly puts it—"Heads are sometimes so little that there is no room for wit, sometimes so *long* (or as I should say, *large*) that there is no wit for so much room." Another type has been named *Mongol* from a physiognomical resemblance to the Eastern Asiatics, though our highly intelligent Japanese friends might take exception to this designation. A rare but remarkable variety is that called *sporadic cretinism* or *myxœdema* (to which my friend, Dr. Symes Thompson, referred in his Inaugural Address). I mention these selected types because they have well-marked physical characteristics, but there are many others such as those of paralytic, epileptic, and highly nervous children, upon which I cannot now enlarge. From the little I have seen of deaf children I imagine that some of the characteristics I have mentioned may occasionally be traced, and probably the presence of such abnormalities may

help in the difficult discrimination of those who require instruction separately from the deaf child of normal configuration. Defects of development, abnormal nerve signs, and defects of nutrition are the criteria upon which my friend, Dr. Francis Warner, has based his industrious researches for feeble-mindedness amongst 100,000 children in attendance at Elementary Schools.*

Our time will not, however, permit us farther to pursue these aspects of the subject. I promised to speak to you especially of the mode of *Treatment* of Children Mentally Deficient, and perhaps in approaching this I may say a few words as to *preventive* treatment. This will necessarily take us back to the consideration of some of the more common causes of mental deficiency. Some years ago I published, in conjunction with Dr. Fletcher Beach, an article on the Causes of Idiocy and Imbecility, based upon an experience of 2,380 cases. We found that of hereditary causes, the most common was a phthisical or scrofulous family history; then came hereditary mental weakness, insanity or idiocy in the family history; epilepsy and other nerve affections, parental intemperance, maternal ill-health, accident or shock prior to the child's birth. The fact that parents were cousins was noted in 5·83 of my cases, and in 2·54 of Dr. Beach's, the latter being of a lower social class than the former. Convulsions, epilepsy, accidents and illnesses to the child itself were the assigned causes in a large number of cases, but many of these were probably associated with an innate predisposition to mental instability, and often the breakdown occurred at critical periods of the child's development, such as at the first or second dentition or the approach of puberty. We have, therefore, the classification of cases on the basis of causation as *Congenital* or original, *Non-congenital* or acquired, with the intermediate group of *Developmental* cases. The congenital cases from hereditary causes are doubtless the more numerous class, though if we accept the statement of parents on the subject the reverse would be apparently true. Speaking generally we

* See *Report on the Scientific Study of the Mental and Physical Conditions of Childhood*. London, 1895.

may say that hereditary tendencies to nervous diseases and to certain constitutional weaknesses, intensified as they too often are by ill-assorted marriages, are the most frequent causes of mental defect in the offspring. I think there are signs of public opinion awaking gradually to a sense of the impropriety of such marriages, and I have even heard talk in advanced circles of the "right of a child to select his own parents!" I have said enough to emphasize the importance of a healthy, temperate life on the part of parents. For, although our figures do not give that preponderating influence to alcoholic intemperance as a cause of idiocy which has been sometimes claimed for it, it is no doubt a frequent factor in the ill-health and nervous disorders noted as parental causes.

General Treatment.—Mentally feeble children are commonly also physically feeble (often scrofulous or ricketty) and consequently it is specially necessary to build up their health by judicious feeding, and placing them under the best hygienic conditions possible. The body must be toned up so as satisfactorily to perform its functions, and the habits improved by sedulous attention. The parents of mentally deficient children are unfortunately often very unsuitable guardians of their own children, being themselves highly nervous and apt to react injuriously upon the sensitive natures of their offspring. Sometimes too much fuss is made with the deficient child; if not, he is hidden away and neglected. For ameliorative treatment, therefore, the child has a better chance when removed from home and placed under someone familiar with appropriate methods of training.

As long ago pointed out by Séguin, all successful teaching of mentally deficient children must proceed on physiological principles. In other words the training of imperfectly developed intellects must be conducted in as close imitation as possible of the mode in which nature herself proceeds in the development of the faculties of perfect children. Idiots are, indeed, in many respects in the condition of imperfectly developed infants: and valuable hints as to the steps whereby improvements may be obtained in the former, may be gained by careful observation of the evolution of the senses and perceptions in the normal child.

Those conversant with babies will be familiar with the important rôle played by the sense of touch in the development of infantile intelligence. Dr. Séguin says, truly, that "the young baby on waking explores his surroundings, not at first with staring eyes, but with searching hands: he seeks first not for sights, but for contacts." A young child will amuse himself for hours in experiencing the rude or soft, warm or cold, contacts of his various surroundings. Thus by comparison of contacts, perceptions of differences are evolved; and so rudimentary reasoning processes are gradually established. Later the impressions derived through the sense of sight check off those of the sense of touch, and in due course a chain of information as regards the outer world is formed by co-operation of the various senses. The intelligence of the normal child is constantly growing with the evolution of its senses and perceptions.

But with the idiot (and in less degree with the mentally feeble child) there is some hindrance to this normal evolution. The obstacle may be *superficial*, that is, dependent upon dulness of sense organs; more often it is *central*, that is, defect in formation or action of the brain renders it incapable of registering the impressions sent to it. Sometimes the intervening nervous fibres are at fault, so that impressions are not properly conveyed. Whatever the fault, our approach to the brain must necessarily be through the organs of sensation, and Séguin argues that "the organs of sensation being within our reach, and those of thought out of it, the former are the first that we can set in action," so that in practice "the physiological education of the senses must precede the psychical education of the mind."

Following Nature's example we tackle first the sense of *touch*, and we present to the child balls, cubes, objects with rough and with smooth surfaces, which he may handle so as to gain contrasting tactile impressions. We exercise his tactile sense by means of "peg-boards" and simple puzzles, by building bricks, threading beads, &c.; and, of course, all such exercise must be rather of the nature of play than of a scholastic lesson. With dull apathetic cases, with blunted

sensation and feeble reaction, training is commenced by what has been termed a "bombardment of bean bags." These missiles are bright-coloured flannel bags, some five inches square, loosely filled with beans or maize, so that their impact is not hurtful. A bag is hurled by the teacher towards the child who will not at first put up its hand even to guard his face; gradually however he learns in self-protection to ward off the missile. The second step, to catch the bag, and the third, to throw it back to the teacher, mark successive steps of improving mental activity, as well as of sensibility.

The sense of *sight* comes next in importance to that of touch, as regards training. And in the first place it is essential (as no doubt is also the case with deaf mutes) to make sure that the eye itself is all right, and if not, to correct defects by means of glasses. Then comes the task of fixing the wandering gaze, and for this purpose much may be done by the influence of the teacher's own eye. As Séguin quaintly puts it, "the main instrument in fixing the regard is the regard." Guggenbühl, the earliest instructor of Cretins, is said to have gained his pupils' attention by writing in letters of fire, by means of phosphorus, in a darkened room. For quite young children dazzling objects, such as the silvered globes seen on Christmas trees, and for older ones the changing hues of the Kaleidoscope, are of use in this respect. Subsequently, the exhibition and matching of brightly-coloured beads, ribbons, &c., the arrangement of colour blocks and tiles in patterns, help with discrimination of colour.

Taste and *Smell* being essentially animal rather than intellectual senses do not as a rule require much culture in the mentally-deficient class. But discrimination may be exercised by offering to the pupil substances of similar appearance, such as salt and sugar, to be distinguished by taste; ground coffee and snuff to be distinguished by smell, &c. Perverted and abnormal states of these senses are occasionally met with in idiots. We have known of one whose peculiar "taste for literature" was manifested by his "devouring his book," cover and all, and another who distinguished his own and his comrades' clothes solely by the sense of smell!

With regard to *hearing*, my own experience has been—(though as my cases were selected ones at the Royal Albert Asylum, deafness being a bar to admission, I do not lay much stress upon it)—that in the majority of cases mentally-feeble children are not so often deficient in hearing as in the power of listening. They require, indeed, to be coaxed to listen by presenting to them agreeable sounds. Fortunately music has for this class special charms, and a song will often enlist attention when mere speech is disregarded. Our old-world nursery ditties, containing repetitions of simple sounds, such as "Ba, ba, black sheep," &c., "Dickery, dickery, dock," &c., set to attractive tunes are not without use in the education of such children, acting as they often do as the stepping-stones to speech. With some, even low-grade idiots, a tune will be correctly hummed long before any attempt at articulation, and the divine gift of music sometimes persists when there is but little manifestation of mental power in other directions. As Southey satirically remarks, in his "*Doctor*," "Providence has given to some men wisdom and understanding, and to others the art of playing on the fiddle." Instances are not uncommon (and I have one at present under my own care) of mentally deficient children being able quite correctly to reproduce on the piano any tune they have heard, and feeble-minded instrumentalists have even figured on the concert platform.

More or less imperfection of *speech* is extremely common with mentally deficient children. Thus of 589 patients in the Royal Albert Asylum, Lancaster, at the close of my connection with it in 1893, it was recorded that 13 made no attempt at speech; 55 made slight attempts only; 40 made a few articulate sounds only; 88 spoke indistinctly; 166 spoke fairly well; 227 spoke well. So that in the majority the speech was defective, and in about one-third markedly so. The percentage of deaf children was comparatively small—not more than four were absolutely deaf, and about 40 others had been noted as being below the average of hearing power. It was not always the deaf children who were most backward in articulation, however.

At the Scottish Institution for Imbecile Children the late

Medical Officer reported that speech was absent in 34 per cent., imperfect in 24 per cent., and good in only 42 per cent.

In this assembly of experts in the art of teaching articulation, I shall not venture to enlarge upon the doubtless imperfect methods we employed for the amelioration of speech. Suffice it to say that oral, lingual, and labial abnormalities were looked for, and if practicable, corrected. According to Dr. Clouston (*Neuroses of Development*, *p.* 47)—"There are over three times more deformed palates among idiots and congenital imbeciles than among the sane, and only one-tenth of the idiot palates examined were typical, while over two-thirds of them were deformed. The deformity consists of the arch of the palate being high and narrow, approximating in form to an inverted V, or a narrow Gothic arch, instead of the normal horse-shoe contour. In a few extreme cases there was actually cleft palate." In certain types (*e.g.*, Mongol, Cretins) the tongue is found thickened at its tip, and coarse in its development generally, so that its fine adjustments are made with difficulty; moreover, there is often want of power of co-ordination of the lingual muscles. Then the lips are as a rule loosely held, often so loosely that there is overflow of saliva. To improve the power of closing the lips, a flat piece of box-wood, or an ordinary bone paper knife, or penholder stick, may be held by the child between his lips for a few minutes at a time. Blowing a whistle is also of service. Opening and closing the mouth so as to bring the teeth together, putting out the tongue, deviating it to the right and to the left, and touching with it the teeth of the upper and lower jaw respectively, also the roof of the mouth, are other forms of oral exercises, serviceable in overcoming defects of co-ordination interfering with clear articulation.

This preliminary drill is, however, dull work, and the imbecile child requires to be interested in the successive stages of his "speaking" lessons. Owing to the extreme difficulty of sustaining attention with this class, lessons must partake of the nature of play; and the methods of the nursery of imitating the cries of animals, naming toys, articles of clothing and common objects, have to be followed by the

teacher. When at the Royal Albert Asylum I drew up a table to help the teachers in the identification of defects of articulation, and in exercising the children in simple articulatory sounds, and I am glad to hear that the principal instructress has recently had the benefit of a course of training in the oral method at the Old Trafford Institution. I shall merely add that in our uninstructed way we strove to inculcate speech, whenever practicable, rather than mere sign or gesture language, being convinced that notwithstanding the difficulties of the former, the cultivation of speech carried with it the cultivation of the intelligence. But in some cases the intelligence was so feeble as not to justify much expenditure of energy in articulation lessons.

From the cultivation of speech, which occupies an intermediate place between sensorial training and the co-ordination of muscular movement, we pass to the subject of physical training generally. Drill, starting with the simplest movements, is valuable not only for the purpose of muscular development, but more especially for the salutary effect it has in calling forth the faculty of attention and the prompt exercise of obedience. Made attractive, as it may be to this class, by means of music, it often forms the first step towards educational work, and it is of special value to that large class of nervous children who suffer from spasmodic, purposeless movements, the grasping and wielding of wands, dumb bells, &c., exercising both the will and the muscles.

Having thus cultivated the senses and exercised the muscles, we naturally proceed to what is more commonly understood as the scholastic education of the child, with a view of promoting general intelligence and mental activity. In the earlier stages this partakes to a considerable extent of the Kindergarten character, the child's observing powers and activities being pleasantly directed into educational channels. The handling and threading of beads in series of number and colour; the perforation of outline pictures afterwards to be stitched with coloured worsted; various forms of paper-weaving, embroidery and macramé work are useful, not only in overcoming spasmodic finger twitches and giving dexterity,

but in the hands of a judicious teacher form the basis of intellectual exercises. Children with no knowledge of figures will reckon correctly beads to be threaded in series or the threads used in macramé work, and the practical matching of colours is often acquired before their names. Everything must be objectively demonstrated to weak intellects: nothing abstract left to the imagination, which is apt to go astray. Calculation is usually the *crux* of the imbecile, and though counting by rote may be acquired to a considerable extent its practical application in enumerating objects is in many cases not understood. To aid in the appreciation of the value of money, weights, &c., a shop lesson (which is an extension of the old nursery game of shop) is in use in most imbecile institutions—the pupils taking in turn the rôle of shopkeeper and customers, weighing, measuring, and paying for in real coins, genuine samples of grocery and drapery merchandise. In this and all other lessons the old Horatian maxim is borne in mind :—

"Segnius irritant animos demissa per aurem
Quam quæ sunt oculis subjecta fidelibus."

or in briefer prose, "*Facta non verba.*" That is to say, things done or seen make more impression than things merely heard. The usual school subjects are, therefore, taught as far as possible objectively and by illustration. Reading is best put before the child in connection with pictures or objects, the printed and written names of which are learned by association rather than by the laborious system of acquiring the names of letters of the alphabet first. There is comparatively little difficulty in the imitative arts of writing and drawing.

For the mentally deficient child especially (though I think for other children too) mere book-learning is not the most important part of training. As has been well remarked by Fröebel, "In primary education, the doing, the thing done, the teaching and the learning must, in every case, rest on actual fact and on real existence," and that which gives a tangible result, to be grasped in the hand as well as in the mind, is specially helpful to exceptional children. Thus comes in the great value of manual training and of suitable industrial

occupation. The testimony of certain good Spanish monks, who several centuries ago treated with success cases of mental disorder, and even of mental deficiency, by what we may call moral methods, is to the point. "We cure almost all our patients," they say, "except the nobles, who would think themselves dishonored by working with their hands." So with the imbecile, if it can only be discovered in what direction his abilities lie (and this will be often done in the course of his kindergarten instruction), a modicum of manual work will have most salutary influence. In training institutions it is usual for pupils to spend half day at school and half day at work, and at the Royal Albert Asylum we had a series of workshops where mat and basketmaking, tailoring, shoemaking, and carpentering were practised, many of the boys showing considerable skill, and, what was still better, a farm of 150 acres, where there was healthy outdoor employment in the cultivation of the land, and in tending the cows, pigs, horses, &c. The girls were employed in the laundry, sewing rooms, and other domestic departments, and did much of the cleaning work of the establishment; and very proud they were of their doings. The old saying that "All work and no play makes Jack a dull boy" was, however, not lost sight of, and besides frequent set entertainments, active out-door games were encouraged, and loafing very carefully discouraged.

If good moral training be a prime essential in every system of education, it is especially so in the case of mentally deficient children. Not that the mentally feeble child is by nature worse than the ordinary child, but his weakness makes him more pliable, and an evil example, not to say precept, may in his case be specially injurious. Hence the necessity for a good moral atmosphere surrounding him, and a good example on the part of those in charge of him, for he is peculiarly imitative. As a rule, moral discipline may be easily enforced by one who has tact on a system of mild rewards and punishments, adapted to the capacity of each case—the mind in many cases being reached most easily through the stomach. The religious feelings are not necessarily in abeyance in the mentally deficient child, and a simple confidence in the

Universal Father and an idea of duty towards one's neighbour, on the lines of the Golden Rule, should be inculcated.

We can spare but a few words for the results of training. Experience has fully justified the early statement of Séguin on the subject. Writing in 1866 he says, "Idiots have been improved, educated and even cured. More than 30 per cent. have been taught to conform to moral and social law, and rendered capable of good feeling and of working like the third of a man; more than 40 per cent. have become capable of the ordinary transactions of life under friendly control, of understanding moral and social abstractions, of working like two-thirds of a man; and 25 to 30 per cent. have come nearer and nearer the standard of manhood till some of them will defy the scrutiny of good judges when compared with ordinary young men and women." At the Royal Albert Asylum we had a record of nearly 20 per cent. of patients discharged after full training, competent to contribute to their own maintenance (about half actually maintaining themselves), and of 22 per cent. more or less useful to their friends at home. But, of course, with many

> "'Tis not enough to help the feeble up,
> But to support him after."

And there is still room for much benevolent work in the after care of the feeble-minded.

I fear I have wearied you already, but before closing I should like to say a few words about two classes of children specially interesting to teachers of the deaf. I have already alluded to the borderland class of mentally feeble deaf-mutes or deaf imbeciles. It seems to me that all uninstructed deaf children, from the fact of the isolation in which the deprivation of hearing places them, resemble in some measure the imbecile class, and it is in proportion to the impressibility and power of reaction of their brain through the other senses that they rise above it. If, unhappily, the brain is a defective or a damaged one, and the sense of hearing is absent, we have a case in which not only normal stimulus but normal reaction is lacking, and consequently progress must be exceedingly slow and the results of training meagre. This is, however, no reason

why efforts should not be used to improve the condition of such a pupil, and sometimes a capacity for simple industrial occupation may be discovered which will render his existence much more happy and to some degree more useful. For low grade cases I doubt the desirability of long-continued scholastic education, and with due deference I would submit that oral teaching, after a sufficient unsuccessful trial, is inappropriate for such. If, however, such a child can be taught to express his wants by gesture, and encouraged to do something useful with his fingers, it will be worth the effort. The presence of such children is no doubt a hindrance to the progress of the brighter children in classes for the deaf, and now that education for all is compulsory, it seems highly desirable that separate provision should be made for the teaching of the more mentally feeble amongst the deaf mutes, as your Hon. Secretary informs me is already the case in Germany. What number of such children there will be to provide for depends somewhat upon the standard of mental feebleness adopted; and I read in Mygind that the frequency with which deaf-mutism is reported as being complicated with idiocy varies greatly, the two extremes being represented by the North American statistics of 1880, and the Danish statistics of the same year. According to the former no less than 3,339 out of 33,378 deaf mutes were also feeble-minded, or idiotic and blind, *i.e.*, about 10 per cent., while according to the latter there were only 17 such idiotic individuals among 1,243 deaf mutes, *i.e.*, 1·3 per cent. Perhaps the American term "feeble-minded" covers the case of any whom our go-ahead Transatlantic cousins don't consider quite "cute;" and I was jocosely warned by an American friend, when I was about to make the tour of the Institutions for Feeble Minded in the States in 1876, that "he guessed I should find their feeble-minded children about equal to the average British school boy!"

Then I may put in a word with regard to the myxœdematous children, or sporadic cretins referred to by Dr. Symes Thompson in his address. Happily the experience of the last few years has conclusively demonstrated that the administration of the thryroid gland of the sheep quite changes their nature both

physical and mental, and that from being dull and apathetic they are transformed into comparatively active, sprightly children, capable of improving by education. It is true that owing to the brain having been in a state of stagnation, they are necessarily backward children, and they will require special teaching, but their hearing power is not specially at fault, and in London at any rate, I think, their place would not be in the Classes for the Deaf, but in the special Classes for Defective Children, which are doing such useful work in as many as 20 metropolitan centres.

If there be any here who would like to see practical illustrations of the methods which I have been endeavouring to set forth, I should by all means advise them to visit one of these centres of special instruction, organised for the London School Board by Mrs. Burgwin, and see for themselves the beneficial effects of appropriate teaching, and increased teaching power in the case of mentally exceptional children; and the benefit is not only to the dull children thus provided for, but also to the pupils and teachers of the ordinary classes from which they have been withdrawn.

Let me close with one more quotation from Séguin which I feel is appropriate to the labours not only of those who, like him, have helped the imbecile, but equally to those engaged in the benevolent but trying task of giving speech to the dumb. "Our work" says he, "is one ever changing in form, never changing in object: it is a work in which the teacher, the nurse, the physician, the philosopher, the moralist have all something to do, but all that each does must be done in the spirit of affection, and that of the deepest kind. Moral association, sociability, family affinity, all these have to be created in the idiot: his sense of affection stands in need, like all his other senses, of development. All of these poor children may be taught to love by being loved. We may bring skill, even genius to our task, we may understand all mysteries and all knowledge, we may speak with the tongues of men and of angels, and if we have not love it will profit us nothing." This divine charity, in humble imitation of the Great Master, is indeed the key-note, as it will be the key-stone, of all successful work for the amelioration of the afflicted classes.

DISCUSSION

Before opening the discussion the Hon. Secretary, Mr. VAN PRAAGH, read the following extract from a letter he had received from Mr. ADDISON, Glasgow: "I am sorry that distance prevents me appearing at your Meeting on Thursday next to hear Dr. Shuttleworth's paper. The treatment of Children mentally deficient is a subject in which I am much interested, partly because we meet with a good deal of this deficiency in the deaf, and partly because I am often called on to examine children who are not deaf, but who do not speak readily. Many of these latter cases could, I have no doubt, be much benefited by proper treatment; and it seems to me that none are more competent to undertake this treatment, under the guidance of medical men like Dr. Shuttleworth, than trained and experienced teachers of the deaf and dumb."

Mr. VAN PRAAGH continued that he wished strongly to endorse what had been said with regard to the teaching of backward deaf children. Teachers of the deaf all knew what a great drawback a deaf backward child was in a class of deaf children. The effect must be bad, and therefore in some schools in Germany the arrangement had been advisedly come to that there should be special classes for backward and feeble-minded deaf children. He thought, if not mistaken, that this plan was well carried out at Schleswig. He had advised his friends at the head of institutions to have a special class into which to draft backward children, and not to allow them to remain in classes where their presence was a hindrance to the progress of the other scholars. In order to do this they must have schools of certain dimensions, containing numbers large enough to admit of proper classification, and the class for backward children should be under a clever teacher if good results were to be obtained. As to the question whether backward children were to be taught on the pure Oral system, his experience showed that it was better calculated to develop their mental powers than the Manual system was.

Miss HEWETT said that last summer she had the privilege of seeing a school in Germany where the separation of the feeble minded was well carried out. There was entire separation as regards school work. The teachers of the feeble-minded were by no means inferior to the others, and it was impossible not to admire the patience shown in their work. There was no question of the feeble-minded being taught in any other way than on the pure Oral system. The separation was made as much for the benefit of the brighter children as of the feeble-minded. A great many teachers would only be too glad if such a separation could be carried out in other schools.

Mrs. KINSEY said that years ago one of their own pupils came to the school so mentally deficient that she could hardly swallow or take any solid food. It was almost a case for hospital nursing, as well as for kindness and attention, at the hands of the lady superintendent. This girl improved so wonderfully that in manners and habits she became like an ordinary girl. You would not say she was brilliant, but she became one of the best pupils in mental arithmetic, which was a fairly strong proof of what the pure Oral system could do.

Dr. HILL said there appeared to be a mixing up of feeble-minded with backward children, and it was important to know whether Dr. Shuttleworth's 10 per cent. were really feeble-minded, or included those who were merely backward or stupid. When he went to institutions for the deaf he was struck with the fact that the children appeared to be very intelligent indeed. He saw a certain number of deaf children at St. Mary's Hospital; he enquired whether they were sharp or backward; he was nearly always told that a deaf child was about the smartest member of a family. On the whole his experience was that ordinarily deaf children were not stupid. It might be as explained by Dr. Shuttleworth that the feeble-minded were not classed as deaf-mutes, but were classed as idiots or imbeciles. The remarks of Mr. Van Praagh must refer, not to really idiotic children, but to the rather stupid or backward. If so

he would subscribe to the remark that such might very well be taught on the pure Oral system. But for really feeble-minded children, he could not help thinking that it might be permissible to reach their senses in any way. It seemed to be pushing a hobby too far and making a fetish of it, to say that idiotic or imbecile deaf-mutes must be taught only on the pure Oral system. It was like the adherents of the Jaeger principle in clothing, who said the principle must be carried out in all clothing, outer as well as under. He did not say anything against the pure Oral system, which had produced marvellous results; but in exceptional cases there might be room for doing good by other methods.

Mr. Van Praagh said that the right-down idiotic child, being deaf as well, did not properly belong to a school for the deaf, but ought to be sent to a school for idiotic children. A child who was deficient in every respect must not be a member of a school for the deaf. When he spoke of feeble-minded and backward children he spoke of those who, even in case of hearing, would still be backward and feeble-minded. Putting them in the same category as hearing but backward children, he maintained that for the deaf wonders could be done on the pure Oral system, because it gave the teacher the advantages which had been mentioned by Dr. Shuttleworth. It placed at his command both sight and touch, and with these two agents every teacher of the deaf who knew his work could produce the best results. Of course it was more difficult to do anything with children with whom touch was of no avail. As for real idiots, they should be sent to Earlswood or similar Asylums.

Mr. Kutner was sure that the most ardent oralist present would agree with him that the Oral system had its limits. At the same time, even with children of defective intellect, the Oral system could do as much as any other—certainly as much as the sign system. He was glad to hear Dr. Shuttleworth refer to the cultivation of tactile impressions, for he feared that in elementary oral classes the subject was hardly taken sufficient notice of. The most that had been done had been to set aside two or three hours a week for Kindergarten work. Dr. Shuttleworth had told them the value of these lessons; and they would do well to adopt Kindergarten work to the fullest extent in the lower stages of deaf-mute teaching, whether Oral or Manual. Broadly speaking, the earliest class in a school for deaf-mutes should be nothing but Kindergarten. Beginners need not be kept at articulation and lip-reading three, four and five hours a day —it was far too long. Therefore Kindergarten studies should be pursued much more than they are. It was often said that beginners on the Oral system did not learn language soon enough. There was no reason why they should not receive suitable object lessons from the very beginning, thus at once entering upon the cultivation of the discriminative faculty. True, there would be no audible language, but the proper impressions being received, constituted the right preparation for the later oral lessons. It was not educational to check the tendency of the young ones to express themselves in their own way. They might be allowed and encouraged to point out resemblances and differences without doing any violence to Oral principles.

The Rev. W. Stainer, who was in the chair, said that to his knowledge it was very difficult to obtain correct statistics as to congenital or acquired deafness. It was an accepted statement half a century ago that two-thirds of the cases of deafness were congenital; but he had reason now to doubt that and to believe that in the larger proportion of cases deafness was acquired. It was very likely that deafness acquired in infancy would often be assumed to be hereditary. His observation led him to the conclusion that deafness was often due to accident before or after birth. In the former case it was due to arrested development. There was great reluctance on the part of one class to acknowledge that their children were deaf through neglect or accident, and equal unwillingness on the part of another—the upper—class to admit that their children were born deaf; the latter would attribute the deafness to any cause rather than heredity; while the humbler class would say that the child could hear at one time, and neighbours would declare that they had formerly heard it talking. He relied very little upon statistics with regard to congenital deafness.

However, it was for them to find out how many could be benefited by being taught speech (whether deafness was congenital or acquired), and what were the best means of developing the little speech or hearing some had. (A voice: when practicable.) He quite agreed with that "when practicable;" it was an important part of the question. As Dr. Shuttleworth had observed, many children were brought to them who were not really teachable on the Oral system. It was of no use to say "It is possible," because many things were possible that were nevertheless impracticable. The children were mixed up, the bright with the feeble minded and dull. But take a very dull child, with very little brain power, was it possible to give him any speech that would be of any practical value? When such a one came to him at the age of 11 or 12, he considered it wholly impracticable. In early years some might have had normal reasoning power; but, having lived up to 11 or 12 without exercising the reasoning power, because it had acquired no language, it had become very dull indeed. That child should not be classed with the feeble-minded; if the brain could be exposed it would be found it was not in the same condition as the abnormally feeble-minded. He had such a variety of cases under his superintendence as to warrant him in these conclusions, which he believed would be borne out by his teachers. They had some feeble-minded—not very many, and also a large number of dull children, who were dull from the lack of cultivation of their brain power during their early years. He had been an advocate of Oral training and a teacher for many years, and he believed in teaching a deaf child to speak as early as it could be taught anything; but some were not capable of being taught to speak, and with those who were capable it was a slow and difficult process, except with a few under very favourable conditions. As to the training of the senses of sight and touch, Mr. Kütner was slightly mistaken in saying that the subject had not received attention, because the School Board for London had developed this training to a great extent. Not less than four hours a week was given to it, and it was prescribed by the Department as entitling to a grant, which was very liberal. Of the whole grant for the instruction of the deaf, two-fifths were for *manual instruction*, and three-fifths for ordinary school instruction. Of course something worthy of the grant was expected from the "hand and eye" training adopted. The teachers worked most assiduously, and took all the pains they could with manual instruction of every kind. He had not heard of more suitable occupations than those being carried out in the classes of the School Board for London; they were doing a very great deal of good, and they hoped to do a great deal more.

Miss Cooke asked,—Do you find idiot children very obstinate?

Mr. Van Praagh must candidly confess that he entirely disagreed with the rev. Chairman. It was not the duty of teachers of the deaf to give manual or industrial training; it was their first duty to give a child the power of lip-reading and of expressing itself in spoken language. It was too late now to go into a subject of such great interest; therefore, with the consent of the meeting, they would discuss it thoroughly at some future meeting.

Mr. W. Storr thought it was desirable to enquire whether the anthropometrical measurements which had been for some time carried on by a Committee of the British Association had been in any way connected with the subjecf of Dr. Shuttleworth's address, so as to show the relation between physical capacity and mental capacity.

Dr. Shuttleworth said he was obliged to the meeting for the way in which it had received his lengthy communication. He was unable to decide, where experts disagreed, whether it was better to take up manual training concurrently with school work, or to do school work at one educational period and manual training at another. Of course his own experience had been with idiots, and with less intelligent children than those found in schools for the deaf; but he could not help feeling that manual training was an important element in drawing out the intelligence. If such scholars were kept in school all day, he believed they would not get on so well as they would if kept in school in the morning and set to work in the afternoon. However, he had had to deal with imbeciles; and he was not able to give an experienced opinion with regard to the treatment

of deaf children. He could quite understand that even bright deaf children required an immense time to learn lip-reading, and it became a question how much time could be spared for manual occupation during the school career. Dr. Hill asked what he meant by the term "feeble-minded." The statistics he gave were a quotation from Mygind's book, and he was not sure of the exact term used by this author. In America the term "feeble-minded" covered the whole class of the mentally defective: it included the lowest grade of intellects, so as to avoid hurting the feelings of parents; and (as he had been jocosely told by an American friend) it included "children not very different from the British school-boy." Thus the Americans swept into the net a much larger number than we should in using it in the sense it had now acquired in England. The Royal Commission used the term "feeble-minded" in its limited application to those superior to the idiot and imbecile, yet incapable of being educated with ordinary children. As far as his observation had gone, it was a question of difference not in kind but in degree; the idiot shades into the imbecile, and the imbecile into the "feeble-minded"; and of course a different training was appropriate to each class so far as it could be obtained. Some attention had been given to the subject of anthropometric measurement in relation to the inmates of idiot institutions. When he was at Lancaster, he prepared, and Mr. C. Roberts tabulated in diagrammatic form, a series of observations for incorporation with others which were then being carried on by the Committee of the British Association. He had also contributed to the Health Exhibition Congress of 1884 a Paper embodying tables which showed that in height and weight the average of children in idiot institutions was below the average of normal children of corresponding ages; and therefore it appeared that physical development measured in that way did bear a pretty definite relation to the want of mental development. Similar observations had been made by Dr. Bowditch in America, and they were of similar import. Some feeble-minded children were obstinate, and at times very little could be done with them; and it was here the tact of the teacher came in. Sometimes such a child was like the proverbial donkey, which, if you placed fodder before it, would go for it; that is to say, the idiot could be led but could not be driven. In reply to Miss Cooke, he might state that mentally deficient children were apt to show marked susceptibility to surroundings in the manifestation of intelligence. For instance, on a dull day a whole class would be extremely stupid, much more so than on a bright day. This difference would obtain in all schools, but it did so to a material degree with an imbecile class. As to the proportions of congenital and acquired cases of idiocy, if the statements of friends were to be accepted, one would have said that the number of acquired cases exceeded the congenital; but one did not always take the statements of friends for gospel. When Superintendent of the Asylum at Lancaster, he found that from year to year of a patient's residence more extended information was obtained as to the family history; and he came to see that this accumulated information changed the etiological aspect of some cases. There was a large number of cases in which it was stated by parents that the affliction was of accidental origin; but it gradually came out that neighbours had noticed something peculiar from early infancy, though the mother had not recognised it till the child was vaccinated or had sustained some trivial accident. and then the idiocy was attributed to vaccination or the accident, though really congenital. As far as he could judge about 60 per cent. of cases were congenital and 40 per cent. acquired; and there was an intermediate class congenitally predisposed to mental breakdown at some crisis of development.

A cordial vote of thanks to Dr. Shuttleworth, proposed by Mr. Van Praagh, and seconded by Dr. G. F. Still, was unanimously carried; and the proceedings terminated with the usual compliments to the Chair.

(The Lecture was illustrated by photographs, casts, and a collection of school and industrial work by inmates of the Royal Albert Asylum.)